

Truckee Meadows Flood Control Project

October 2004 Newsletter



US Army Corps
of Engineers



The U.S. Army Corps of Engineers

**Invites YOU!
to a Public Workshop
for the**

Truckee Meadows Flood Control Project

**Tuesday, October 26, 2004
from 6:00 pm to 9:00 pm
Rainbow Bend Clubhouse, Lockwood**

Light Refreshments will be served.

Downstream Public Workshop

On October 26, the Corps will be hosting a workshop with the downstream stakeholders to discuss the anticipated effects of the flood control project on downstream property owners. The Corps will be providing an opportunity for stakeholders to participate in the process of identifying acceptable solutions to those effects.

Downstream
is the area of
the river
from Vista
to Pyramid
Lake

No matter what you may have heard, no decisions have been made yet on project features downstream of the Vista reefs (nor have any decisions been made on the upstream portion of the river). This is your opportunity to participate in a workshop whose purpose is to generate alternative solutions that the Corps will then evaluate and consider during the project alternative formulation process. The Corps will address comments and suggestions submitted during this workshop in spring 2005.

Please join us and be prepared to work collaboratively with your neighbors to

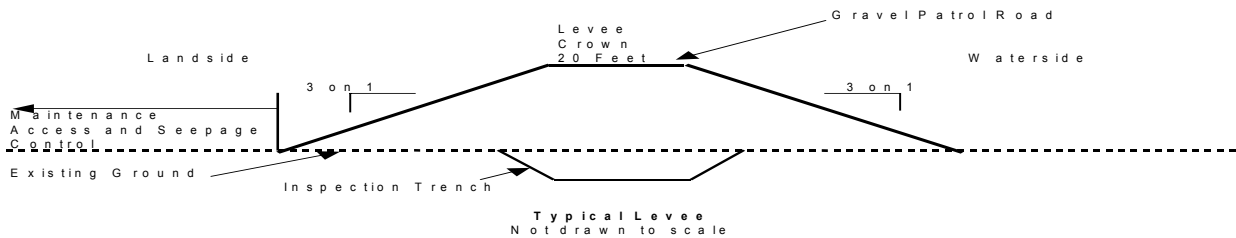
directly work within the Corps planning process and help provide solutions to flooding from the Truckee River.

Draft Agenda

1. Introductions and Overview
2. Project Update
3. Definition of the Problem
4. Overview of draft Floodplains and Long Valley Creek Hydrology
5. Plan Formulation Workshop
 - a. Process explained
 - b. Small group breakout sessions
 - i. Brainstorming solutions
 - ii. Consolidate solutions within groups
 - c. Present solutions to Corps
6. Next steps, what the Corps will do with these solutions
7. Meeting Closure

Levee Use and Considerations in Urban Areas

Levees are among the floodwater containment features under consideration for the Truckee Meadows Flood Control Project. Levees are earthen embankments located directly adjacent to the river or set back a distance from the river (aka "setback levee") which are built high enough to contain a specific flood event (e.g., the 100-year flow) with additional height added to allow a margin of safety. Another type of levee is a "ring levee" that encircles a structure or group of structures and prevents damage from seasonal high water. The Truckee Meadows Flood Control



Project draft project alternatives each include all three types of levees to provide additional flood carrying capacity to the river and protection of structures within the flood plain.

Levees are composed of earthen fill materials that meet engineering standards that allow it to resist water uptake. The levee section includes a generally level levee crown and side slopes that can range from moderately steep to very gentle, depending on the strength of the levee foundation, estimated settlement and other slope stability criteria. The crown widths used for the Truckee Meadows Flood Control project will be 20 feet and the side slopes will generally be 1 vertical on 3 horizontal (there will be a 3 foot distance for every 1 foot vertical rise). See schematic above of a typical levee cross section.

The levee construction will require a permanent real estate easement to install the levee section and provide for a 15-foot wide maintenance access area that also allows for under-seepage remediation measures. Measures to control the seepage include: relief wells to intercept, collect and return the seepage

Under-seepage is the movement of water through the riverbank and river bottom to the landside of the levee. This movement is due to the head created by high stages of the floodwaters and creates uplift pressures and concentrated seepage through or under the levee.

to the river; seepage berms - additional material added to the landside of the levee to provide stability; and drainage blankets - drainage materials attached to the landside toe of the levee. These under-seepage measures could add from 10 to 50 feet, or more, as necessary, to the footprint of the levee section. Additionally, a temporary construction easement, generally 25 feet in width, will be required to build the levee.

Erosion protection will be included in construction and will range from grass seeding of the levee slopes to rock revetment, depending on the velocities of the flood flows to be resisted. The levee crown will include a 12-foot patrol road and may also be used for recreation or bicycle trails. Existing utilities that cross underneath or above the levees will be relocated or protected. Excessive vegetation on the new levees will be monitored and controlled as inspection of the condition of the levee can be hampered and root systems may create seepage paths through the levee.

An inspection trench, along the proposed alignment of the levee, will be created during construction, to a depth of a minimum of 6 feet. The purpose of this trench is to expose or intercept any undesirable features as old water or sewer lines, animal burrows, buried logs, or pockets of unsuitable materials. Explorations, using drill rigs, will also be accomplished to characterize the deeper subsurface conditions.

Levees are one of the most traditional flood damage reduction features to install but require significant available area and can be visually intrusive if constructed high enough; so why do we consider them a viable construction option? Levees are less expensive to construct than floodwalls or dams, fill materials are easily locally obtained, and maintenance (which will be a responsibility of the local sponsor) is not difficult to accomplish.

The Project Delivery Team Roles and Responsibilities – Program and Project Management

The Corps' Truckee Project Delivery Team (PDT) for the Truckee Meadows Flood Control has two project managers, and a budget analyst.

The project managers are responsible for managing the PDT members, leading project meetings, executing project budgets and schedules, coordinating with project sponsors and stakeholders, and upward reporting of the project to Corps Headquarters and Congress.

The budget analyst is responsible for project budget planning for future years, tracking expenditures, preparing fact sheets for

congressional budget hearings, and disbursing funds for labor, contracts, and travel to the PDT.

Upcoming Meetings

- October 26th Public Workshop in Wadsworth
- November 4th Storey County Commissioners Meeting. The Corps will provide an overview of the draft Programmatic Agreement for cultural resources on the Truckee River. The Corps will be asking if the County would like to be a concurring party on the agreement.

Next Newsletter

Coming up next month: roles and responsibilities of the Corps Engineering team, follow-up on downstream workshop, additional project features defined, and more.

Making Contact

Visit our website at:

www.spk.usace.army.mil/projects/civil/truckeemeadows

Your questions and comments on the contents of this newsletter are welcome. Please contact us at the following e-mail address:

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HAPPY HALLOWEEN & NEVADA DAY!



from the CORPS PDT